

STREAMLINED DESIGN PROCESS

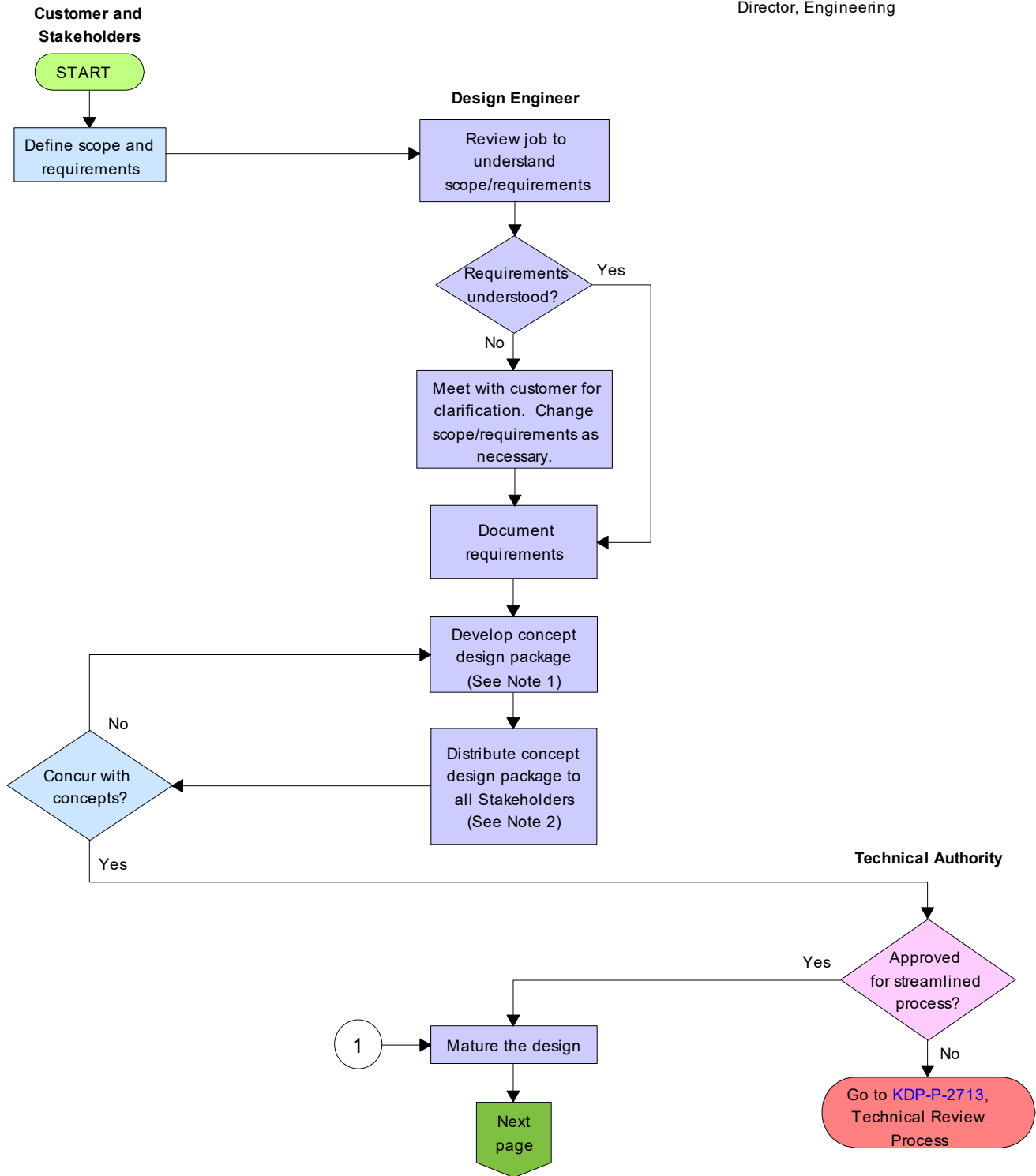
KDP-P-2723

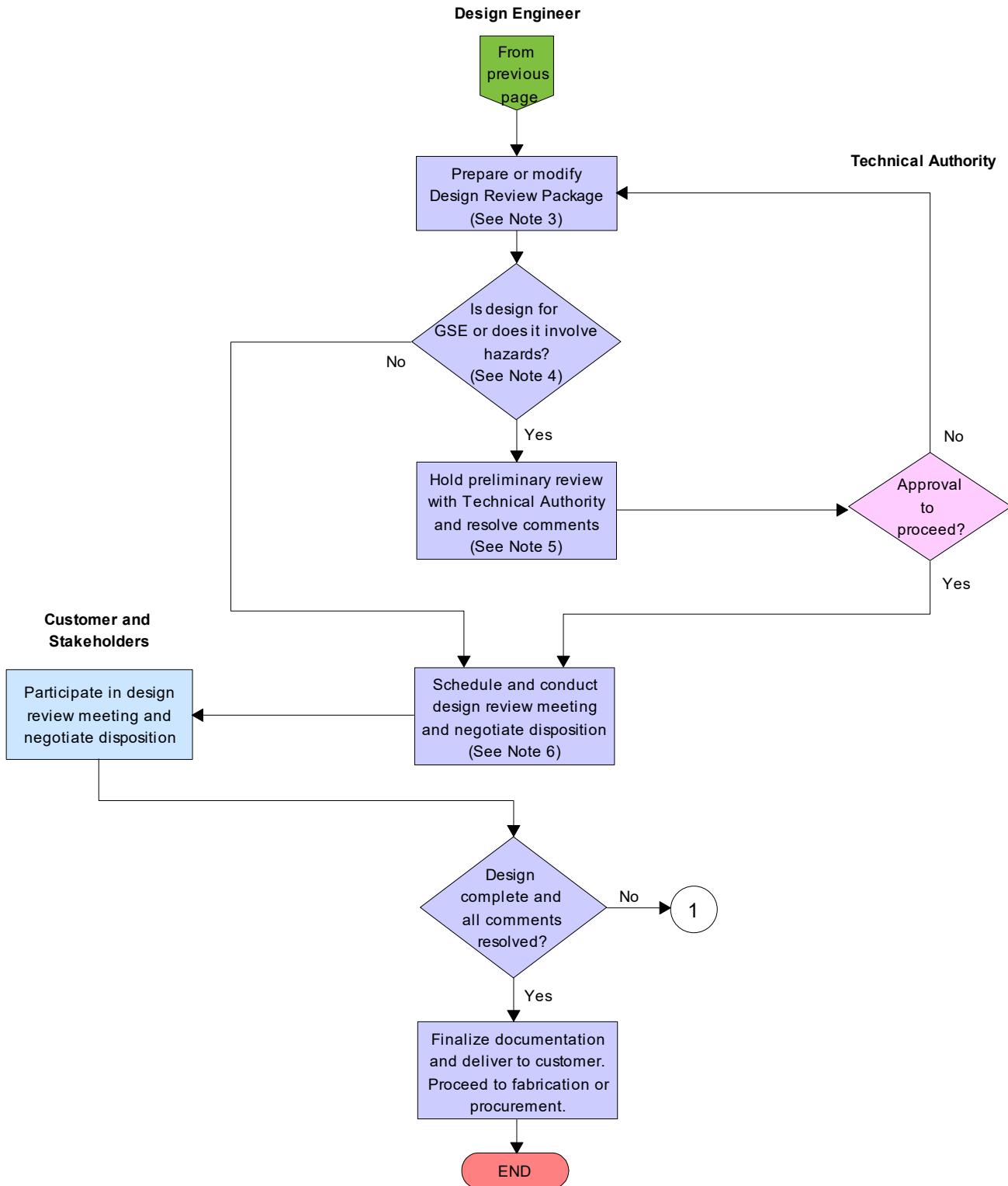
Rev: B

Objectives:

- To provide a streamlined process for the design and technical review of prototypes, test fixtures, tools, etc., that satisfies the intent of [NPR 7123.1](#);
- To document customer (and other stakeholders) concurrence of concepts;
- To provide for peer review of streamlined design products;
- To ensure that the technical authority is cognizant of streamlined designs;
- To ensure resolution of review comments.

Director, Engineering





Notes:

1. Initial concept design package should include the scope, requirements, concepts (i.e., sketches, models, etc.). Identify the customer, the responsible lead designer and applicable technical authority. For most projects the technical authority will be the Chief Engineer. Additional technical authority may apply, depending on the project or customer. For example, for pressure systems the technical authority might include the Pressure Systems Manager.

2. Stakeholders include the customer, the applicable technical authority, users, design peer(s), manufacturing, and applicable safety representatives.

3. Design review package should include the following:

Team Roster - M

Requirements Document - M

Schedule - M

Design Analysis - M

Engineering Documentation (drawings, models, sketches, etc.) - M

Hazards Analysis - M

Concept of Operations - O

Cost Estimate - O

Long Lead Items - O

Drawing Tree - O

Component Qualification - O

Verification Plan - O

Materials & Processes Plan - O

Transportation Plan - O

Risk Assessment - O

System Assurance Analysis - O

Human Factors Assessment - O

M = mandatory

O = optional (at the discretion of the design engineer and technical authority)

4. Ground Support Equipment (GSE) as defined in the NASA Technical Standard for Ground Support Equipment, [NASA-STD-5005](#), including anything that may contact flight hardware. Hazards includes safety critical systems, including systems under pressure, stored energy, suspended loads, high voltage, etc.

5. For most projects the technical authority will be the Chief Engineer and the review forum will be the Engineering Review Board (ERB) as defined in [KDP-P-2761](#), Engineering Directorate Boards, Panels, and Reviews, Structure and Process Document, although streamlined reviews may be held at the discretion of the Technical Authority.

6. Invite customer, users, the Design and Development Chief Engineer, the applicable operations Chief Engineer, other applicable technical authority, applicable safety representatives, design peer(s), manufacturing, and other stakeholders.